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CLAIMS

1. A method for the preparation of a halosilylated chain hydrocarbon represented by the following formula:

$$CH_2 = C(R^1) - (R^2)_a - CH(R^1) - CH_2 - SiR^3_b X_{(a \cdot b)}$$
(3),

or by the following formula:

$$R^3{}_bX_{(3-b)}$$
 Si $-$ CH $_2$ $-$ CH (R^1) $-$ ($R^2)_a$ $-$ CH (R^1) $-$ CH $_2$ $-$ Si $R^3{}_bX_{(3-b)}$ (4), (wherein R^1 a hydrogen atom or a monovalent hydrocarbon group, R^2 is a divalent hydrocarbon group, R^3 is a monovalent saturated hydrocarbon group or an alkoxy group, "a" is 0 or 1 and "b" is an integer from 0 to 2), wherein said halosilylated chain hydrocarbon is produced by subjecting (A) a diene-type compound represented by the following general formula:

$$CH_2 = C(R^1) - (R^2)_a - C(R^1) = CH_2$$
 (1)

(wherein R1, R2, and "a" are the same as defined above) and

(B) a hydrogenhalosilane represented by the following general formula:

$$HSiR3b X(3-b)$$
 (2)

(wherein R³ is a monovalent saturated hydrocarbon group or an alkoxy group, X is a halogen atom, and "b" is an integer from 0 to 2) to a hydrosilylation reaction in the presence of (C) a hydrosilylation catalyst and (D) an ether compound having no aliphatic triple bond.

2. The method of according to claim 1, wherein said ether compound (D) is selected from the group consisting of an epoxy compound and compounds represented by the following general formulae:

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$$R^4 - O(R^5 - O)_n - R^4$$
 (5),

$$HO - (R^5 - O)_m - R^4$$
 (6),

$$HO - (R^5 - O)_{m+1} - H$$
 (7),

$$(8)$$

$$(9)$$

- 5 (wherein R⁴ is a monovalent saturated hydrocarbon group or a monovalent silylated saturated hydrocarbon group, R⁵ is a divalent saturated hydrocarbon group or a silylalkyloxyalkylene group, R⁶ is a divalent hydrocarbon group or a silylalkyloxyalkylene group, R⁷ is a divalent hydrocarbon having 2 or more carbon atoms; "n" is an integer equal to or greater than 0, and "m" is an integer equal to or greater than 1).
 - 3. The method according to claim 1, wherein R^1 is a hydrogen atom or an alkyl group and wherein R^2 is an alkylene group.
- 15 4. The method according to claim 1, wherein R³ is an alkyl group, and X is a halogen atom.
 - 5. The method according to claim 1, wherein R⁴ is an alkyl group, R⁵ is an alkylene group, R⁶ is an ethylene group or an propylene group, and R⁷ is any group between ethylene and hexylene, inclusively.
 - 6. A method of conducting a hydrosilylation reaction, characterized by subjecting (A) a diene-type compound of the following general formula:

$$CH_2 = C(R^1) - (R^2)_a - C(R^1) = CH_2$$
 (1),

25 (wherein R¹ is a hydrogen atom or a monovalent hydrocarbon group, R² is a divalent hydrocarbon group, "a" is 0 or 1), and

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(B) a hydrogenhalosilane represented by the following general formula:

$$HSiR^{3}_{b} X_{(3-b)}$$
 (2),

(wherein R³ is a monovalent saturated hydrocarbon group or an alkoxy group, X is a halogen atom, and "b" is an integer from 0 to 2) to a hydrosilylation reaction in the presence of

- (C) a hydrosilylation catalyst and (D) an ether compound having no aliphatic triple bond).
- 7. The method of conducting a hydrosilylation reaction according to claim 1,
 10 wherein said compound (D) is selected from the group consisting of an epoxy
 compound and compounds represented by the following general formulae:

$$R^4 - O(R^5 - O)_n - R^4$$
 (5),

$$HO - (R^5 - O)_m - R^4$$
 (6),

$$HO-(R^5-O)_{m+1}-H$$
 (7),

 \mathbf{or}

(9)

(wherein R⁴ is a monovalent saturated hydrocarbon group or a monovalent silylated saturated hydrocarbon group, R⁵ is a divalent saturated hydrocarbon group or a silylalkyloxyalkylene group, R⁶ is a divalent hydrocarbon group or a silylalkyloxyalkylene group, R⁷ is a divalent hydrocarbon having 2 or more carbon atoms; "n" is an integer equal to or greater than 0, and "m" is an integer equal to or greater than 1).

25 8. The method of conducting a hydrosilylation reaction according to claim 6, wherein R¹ is a hydrogen atom or an alkyl group and R² is an alkylene group.

- 9. The method of conducting a hydrosilylation reaction according to claim 6, wherein R^3 is an alkyl group, and X is a halogen atom.
- 10. The method of conducting a hydrosilylation reaction according to claim 6,
 5 wherein R⁴ is an alkyl group, R⁵ is an alkylene group, R⁶ is an ethylene group or an propylene group, and R⁷ is any group between ethylene and hexylene, inclusively.

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